

MEDICAL PRACTICE

*Medical History***Dreadnought Seamen's Hospital**

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On the southern bank of the Thames in the historic Borough of Greenwich, between Sir Christopher Wren's Royal Naval College and the *Cutty Sark*, within sight of the National Maritime Museum, and overlooked by Greenwich Park with its famous Observatory (Greenwich Mean Time) there stands a fine Georgian building (fig 1). Its notice board says: "The Dreadnought Seamen's Hospital." It is a hospital with a history.

In the hospital world today there is a tendency for streamlined conformity, and individual establishments are being swept away, allegedly for the sake of economy, though often the

converse ultimately proves to be the case. The Dreadnought Seamen's Hospital's future is uncertain, since the Regional Health Authority wish to include it in their current economies. This is being strongly resisted by the shipping industry through the National Maritime Board, which claims that the hospital is a national hospital and should be recognised as such and a separate financial provision made for it.

Fund for distressed mariners

After the Napoleonic Wars at the beginning of the last century seamen left their ships to return to their families, find other jobs, or join other ships. The Industrial Revolution was in full swing, and many seamen were unable to find their families because they had moved to new, growing industrial areas to find work. Brave seamen who had fought for England were seen roaming the streets of London, homeless, friendless, unemployed, and suffering from scurvy; smallpox and cholera were rife, and many seamen carried venereal disease. Thus Zachary Macaulay and William Wilberforce, observing these mariners in the streets of London, decided that help must be given to those men who had played so great a part in saving England from defeat, and in 1818 they established a fund from contributions made by the general public for the temporary relief of distressed mariners. This led to the planning of a hospital solely for seamen that would treat them during illness and find them work in other ships after discharge from medical care. The Seamen's Hospital Society owes its origin to the committee appointed to manage this first fund.

The initial meeting of the first committee of management of the Seamen's Hospital, under the chairmanship of William Wilberforce and a small band of philanthropists, took place in the City of London Tavern on 8 March 1821, which is still commemorated as Founder's Day. From the outset the society has been accorded royal patronage, firstly by King George IV, and now by Queen Elizabeth II. Moreover, in 1833 the vice-patrons included the Emperor of all the Russias, the King of Prussia, the King of Denmark, and the King of the Belgians.



FIG 1—Dreadnought Seamen's Hospital today.

Dreadnought Seamen's Hospital, Greenwich SE10

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The minutes of the first committee meeting contain a description of seafarers that may to a certain extent ring true even today:

"Sailors in general are bred up to their occupation from early youth and retain few of the habits of persons employed on shore. They appear to have no conception of the possible approach of misery until it is too late to escape it. If informed of or directed to hospitals, asylums or other places of relief ashore which do not bear the name Seamen's they are unwilling to approach them and will submit to be driven to such receptacles only by extreme misery. They will remain on board their ships, rather than consent to be taken to an hospital on shore, although with the prospect of returning health. This is well known to every person acquainted with the habits of these peculiar beings."

First hospital ships

A former 48-gun ship, the *Grampus*, was loaned by the Admiralty for conversion as the first hospital ship, and after many alterations and repairs had been carried out (victuals being provided by the society, and bedding and linen by the Royal Naval Hospital at Haslar) the first patients boarded her at Greenwich on 25 October 1821. Greenwich was chosen as the most convenient mooring site to pick up sick men from ships as they passed upstream to London. Staff were appointed on a remunerative basis, and most of the medical officers offered their services free. Patients were accepted without subscribers' letters of recommendation, for an appearance of illness was sufficient ground for admission. Accommodation was for 181 men. Rowing-boats were attached to the ship to convey patients, staff, and visitors to and from the shore. Wards were situated on the lower decks, lit by whale-oil lamps. Operating theatres were also on the lower deck, and operations were carried out by candlelight. The weather deck served convalescent patients under canvas shelters.

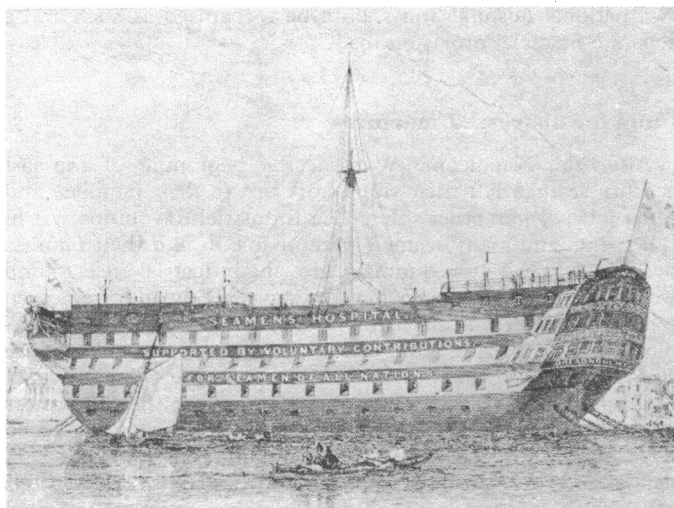


FIG 2—Hospital ship *Dreadnought*, in use from 31 October 1831 to 25 January 1857.

By 1824 the hospital had admitted and treated 3369 patients. In 1831 it became clear that the *Grampus* was no longer large enough, and the Admiralty agreed to replace her with a larger hulk, the *Dreadnought* (fig 2). She was a 104-gun ship and had been Vice-Admiral Collingwood's flagship from May to October 1805. At Trafalgar she served under the command of Captain John Conn (a distant cousin of Nelson). After the necessary conversion (costing £2393 18s 7d) she could accommodate 250 patients and 150 convalescents. The provision of convalescent facilities was also remarkable (modern planners, please note).

At that time most other hospitals limited the patient's stay to the period of actual medical treatment. But seamen, unlike their fellow landmen, could not often expect their relations to care for them during their convalescence. Arrangements were therefore made for them to remain on board until they had completely recovered their health and were fit to resume their calling.

In 1832 a member of Lloyds, John Lydekker, directed in his will that four of his ships should be sold and the proceeds given to the hospital. These realised the sum of £55 000 and not only gave financial security but gave rise to the Seamen's Hospital Society being incorporated by an Act of Parliament in 1833. It is noted in some description of the hospital that "from the lowest deck (being level with the landing stage) are hoisted through the hatchways all severe cases of accident, many of which arrive from the ship-building yards situated on both banks. All severe casualties are received here, whether the sufferer be a sailor or not."

In 1837 Edinburgh University recognised the *Dreadnought* as suitable for their medical students to do part of their surgical and anatomical studies while also extending their practical knowledge of tropical diseases.

The Seamen's Society campaigned for many improvements in seamen's health. It was instrumental in introducing a Bill in 1867 and obtaining royal assent for the daily issue of lime juice against scurvy, then particularly rife among seamen. Cholera and typhus were common, and the society often took over responsibility for combating outbreaks. Smallpox rarely occurred among seamen, although it was prevalent ashore. Since seamen came from all parts of the world and included Asiatics, many arrived with tropical diseases. The high incidence of such diseases persuaded the society to provide special accommodation, and when in 1856 the *Dreadnought* in turn became too small the *Caledonia*, a 120-gun ship, was acquired to replace her. By this time the hospital ship *Dreadnought* had become world famous as a refuge for sick seamen, and special permission was granted by the Admiralty for the use of the name *Dreadnought* to continue.

Hospital brought ashore

From 1860 the society had been debating whether, for the sake of the patients, the hospital should move to a more convenient mooring or a new one be built ashore. Application was made to the Admiralty for the Greenwich Hospital, to which merchant seamen had been compelled for many years to pay contributions without receiving any advantage therefrom, and which at that time was nearly empty. After many protracted negotiations their lordships indicated their willingness to lend the society the Royal Naval Infirmary together with Somerset Ward on lease at a nominal rental of one shilling a year. On 13 April 1870 the patients were moved from the ship into the newly acquired buildings: the *Dreadnought* had come ashore.

Once ashore the society expanded, opening more hospitals and advancing its work. For the first time the *Dreadnought* had a matron and a female nursing staff, and in 1877 the *Dreadnought* School for Nurses (one of the earliest training schools on the lines prescribed by Florence Nightingale) was founded. By 1880 two "clearing stations" for seamen were opened at Gravesend and the East India Dock Road, which were not closed until 1921 and 1930 respectively. In 1890 the first branch hospital was opened at the Albert Dock and at first dealt with the ever-growing problem of tropical diseases. A considerable amount of research was carried out there by Sir Patrick Manson. In 1899 the London School of Tropical Medicine was founded at the Albert Dock Hospital under the administration of the Seamen's Hospital Society. Other hospitals, a sanatorium, a convalescent home for sailors in Kent, and even a hospital in Marseilles were acquired, but the only surviving hospital for seamen today is the *Dreadnought* Hospital at its 100-year-old site at Greenwich.

In 1948, along with most other hospitals, the Dreadnought Seamen's Hospital was taken over to form part of the National Health Service.

The hospital today

A visitor to the ship *Dreadnought* once said in 1850 that "the hospital would be a good school for physiognomy." This is still true today, for the patients continue to come from all parts of the world. So do many nurses and doctors, who "double-up" as interpreters.

It is not sufficiently realised that hospitals for seafarers have particular problems. The shipping industry demands that a seaman should have a higher standard of health as he may be without the services of a doctor for long periods. There is also the problem of religion and food, and special diet sheets are prepared by the hospital's kitchen. From the welfare and employment point of view it is necessary to keep in constant contact with foreign embassies, consulates, and shipping agencies, as well as with the immigration authorities.

The hospital offers full general medical services, mainly for male patients, but stewardesses have also been seen in the respective wards. There are five wards dealing with medical conditions; general surgery; orthopaedic, ENT, and eye surgery; dentistry; and diseases of the skin. There is a special VD clinic, which has recently been extended to deal with female patients. There is also a "homeward-bound" unit. In 1973 a modern rehabilitation centre was opened, consisting of a

remedial gymnasium, a physiotherapy and occupational therapy room, and also a billiard room. There are communal rooms and facilities for reading and writing. The bigger wards have colour television. The hospital will keep a seaman until he is fully fit to return to sea. The often complicated processes of administration and social work necessitate a system of "tidal priorities" to coincide and dovetail with shipping movements. At the Dreadnought the seafarer has the companionship of fellow seamen, and there is a good and understanding welfare department, which deals with any personal problems a seafarer may have.

There is no waiting list at the Dreadnought Hospital. All patients are seen straight away and admitted when needed. Rather than hang about his town waiting to go to the local hospital a seafarer may be treated at the Dreadnought at once and return to sea that much quicker. If a seafarer is sick or injured abroad the shipping company or agent will, if necessary, arrange for his repatriation and flight back to England.

The Dreadnought Hospital has no shortage of sisters or nurses. Most of the staff have trained there and are used to seafarers' problems. Adjacent to the hospital is Nairne House, a Seamen's Hospital Society property, which provides accommodation for close relatives of seafarer patients from outside the London area who are seriously ill.

As long as there are ships sailing on the high seas there will be seafarers. At the Dreadnought Seamen's Hospital at Greenwich, where there is no rigid discipline as in other hospitals, the matron, sisters, nurses, and doctors can provide not only expert medical treatment but also social help and a human touch when needed.

Statistics at Square One

V—Populations and samples

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Populations

In statistics the term "population" has a slightly different meaning from the one given to it in ordinary speech. It need not refer only to people or to animate creatures—the population of Britain, for instance, or the dog population of London. Statisticians also speak of a population of objects, or events, or procedures, or observations, including such things as the quantity of lead in urine, visits to the doctor, or surgical operations. A population is thus an aggregate of creatures, things, cases, and so on. It also has several other properties besides this generality of meaning.

Though a statistician should clearly define the population he is dealing with, he may not be able to enumerate it exactly. For instance, in ordinary usage the population of England denotes the number of people within England's boundaries, perhaps as enumerated at a census. But a physician might embark on a

study to try to answer the question, What is the average systolic blood pressure of Englishmen aged 40-59? His population here is Englishmen. Who are they? Not all Englishmen live in England, and of those that do the social and genetic background may vary. Or a surgeon may study the effects of two alternative operations for gastric ulcer. But how old are the patients? What sex are they? How severe is their disease? Where do they live? And so on. The reader needs precise information on such matters if he is to draw valid inferences from the sample that was studied to the population being considered.

Samples

Since a population commonly contains too many individuals to study conveniently, an investigation is often restricted to one or more samples drawn from it. A sample may therefore, like a population, consist of immaterial and abstract things as well as creatures and objects. But, to allow true inferences to be made about a population from study of a sample, the relation between the sample and the population must be such as to make that possible.

Consequently, the first important attribute of a sample is that every individual in the population from which it is drawn